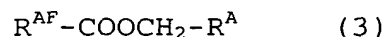
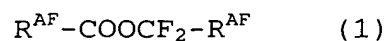


WHAT IS CLAIMED IS:

1. A process for producing the following fluorinated ester (1), which comprises a transesterification step in which the following fluorinated ester (1) and the
5 following compound (2) are reacted for transesterification to obtain the following compound (3), and a fluorination step in which the compound (3) is then fluorinated to obtain the following fluorinated ester (1) in an amount larger than the molar amount prior to the
10 transesterification:



wherein R^A is a monovalent organic group, and R^{AF} is the
15 same group as R^A or a monovalent organic group obtained by fluorination of R^A .

2. The process for producing the fluorinated ester (1) according to Claim 1, wherein in the transesterification step, at most twice by mol of the compound (2) is reacted
20 to the fluorinated ester (1) for transesterification.

3. The process for producing the fluorinated ester (1) according to Claim 1, wherein in the fluorination step, the fluorination of the compound (3) is carried out by introducing fluorine gas into a liquid phase.

- 25 4. The process for producing the fluorinated ester (1) according to Claim 1, wherein in the fluorination step, the fluorination of the compound (3) is carried out by

introducing fluorine gas into a liquid phase having the fluorinated ester (1) or the following fluorinated acyl fluoride (4) dissolved therein:



5 wherein R^{AF} is as defined above.

5. The process for producing the fluorinated ester (1) according to Claim 1, wherein in the fluorination step, the compound (3) containing the following fluorinated acyl fluoride (4) and/or the compound (1) formed in the
10 transesterification step, is used as it contains the fluorinated acyl fluoride (4) and/or the compound (1):

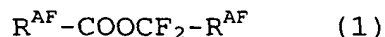
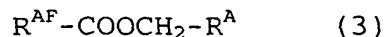


wherein R^{AF} is as defined above.

6. The process for producing the fluorinated ester (1) according to Claim 1, wherein the transesterification
15 step is carried out in the absence of a solvent.

7. The process for producing the fluorinated ester (1) according to Claim 1, wherein the fluorinated ester (1) in the transesterification step is the fluorinated ester
20 (1) obtained in the fluorination step.

8. The process for producing the fluorinated ester (1) according to Claim 1, wherein the fluorinated ester (1) used in the transesterification step is produced by a step of obtaining the following compound (3) by reacting
25 the following fluorinated acyl fluoride (4) and the following compound (2), and fluorinating the obtained compound (3) in a liquid phase:



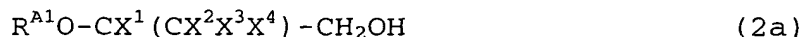
5 wherein R^A and R^{AF} are as defined above.

9. A process for producing a fluorinated acyl fluoride (4), which comprises dissociating the ester bond of the following fluorinated ester (1) obtained by the process as defined in Claim 1:



wherein R^{AF} is as defined above.

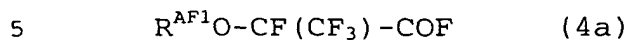
10. The process for producing the fluorinated ester (1) according to Claim 1, wherein the fluorinated ester (1) is the following compound (1a), the compound (2) is the following compound (2a), the compound (3) is the following compound (3a), and R^{AF} is $R^{AF1}O-CF(CF_3)-$:



wherein R^{A1} is a monovalent organic group, R^{AF1} is the same group as said R^{A1} or a monovalent organic group obtained by fluorination of said R^{A1} , and each of X^1 , X^2 , X^3 and X^4 which may be the same or different, is a hydrogen atom or a fluorine atom.

11. A process for producing the following fluorinated vinyl ether (5a), which comprises dissociating the ester

bond of the following compound (1a) obtained by the process as defined in Claim 10, to obtain the following compound (4a), and pyrolyzing the compound (4a):



wherein R^{AF1} is as defined above.

12. A process for producing the following fluorinated vinyl ether (5a), which comprises pyrolyzing the following compound (1a) obtained by the process as defined in Claim 10, at a temperature of at least 250°C:



wherein R^{AF1} is as defined above.